

GYPSY MOTH SUPPRESSION PROJECT SUMMARY
at
ANDREWS AIR FORCE BASE
and
USDA NATIONAL ARBORETUM

May 1, 2008



Report by:
Rodney L. Whiteman, Forester

Forest Health Protection
USDA Forest Service
Morgantown, WV

On May 1, 2008, approximately 215 acres at Andrews Air Force Base and 200 acres at the National Arboretum were aerially treated to reduce gypsy moth populations and to prevent defoliation.

A single application of the insect growth regulator diflubenzuron (Dimilin ®) was applied at the rate of 1 ounce of formulated material in a total mix of 128 ounces per acre.

A rotary-winged aircraft equipped with a Differential Global Positioning System (DGPS) was used to apply the insecticide.

This report documents the spray equipment, insecticide, meteorological conditions, foliage and larval development, and spray coverage for the project. Treatment efficacy will be reported once defoliation surveys are conducted in June and egg mass surveys are completed this fall.

Aircraft and Spray Equipment

Contractor:	Summit Helicopters, Inc.
Aircraft:	Bell 206 B III
FAA Number:	206BE
Pilot:	Jim Carlton
DGPS Brand:	AG-NAV
Spray System:	Isolair
Nozzle Type:	AU 5000 Micronairs
Number of Nozzles:	6
Blade Angle:	35°
Plate Number:	136
Target VMD:	100-150 microns
Application Rate:	96 ounces/acre
Boom Pressure:	37 psi
Air Speed:	70 mph
Swath Width:	100 feet
Flow Rate:	14.14 gpm (desired) 14.08 gpm (actual)

Meteorological Conditions

<u>Time</u>	<u>Temperature (F)</u>	<u>RH</u>	<u>Wind Speed (mph)</u>
0600	43°	100%	Calm
0525	47°	86%	Calm
0655	48°	79%	0-1
0735	48°	81%	0-2
0800	49°	80%	Calm
0830	50°	80%	Calm
0855	52°	77%	Calm

Foliage and Larval Development

Foliage Development (Average)

Southern red oak	50%
Northern red oak	50%
White oak	30%

Larval Development

57 % first instar
43 % second instar

Spray Coverage

Based on observations made by personnel in the treatment blocks and by viewing the AG-NAV printouts (Appendix A), spray coverage was excellent. There were no significant skips in any of the treatment blocks and very little area outside of the treatment blocks were sprayed.

Narrative

The suppression project was divided into six treatment areas, three were located at Andrews Air Force Base (Figure 1) and three were located at the National Arboretum (Figure 2). The project's staging area/loading zone was located in the central portion of the National Arboretum (Figure 2). The rotary-wing aircraft and mix truck arrived at the staging area/loading zone around 1900 on April 30.

A work meeting covering both the work and safety plans, aerial hazards, block treatment sequence, and other issues concerning the project were discussed. The helicopter and mix truck were left overnight at the staging area/loading area. Armed security was stationed at the loading zone/staging area from the time the contractor arrived at the Arboretum until the project was complete.

The project commenced on May 1 at 0558 and was completed by 0857. A total of 6 sorties were flown to complete the project. The daily sortie report is enclosed in Appendix B. Seventy acres were treated in block # 1 at the Arboretum during the first sortie. Block #1 (the golf course) at Andrews Air Force Base was treated with the second and third sorties while the two other spray blocks at Andrews Air Force Base were treated with the fourth sortie. The remainder of block #1 at the Arboretum along with block #2 were treated with the fifth sortie while block #3 was treated with the sixth and final sortie.

The project was completed safely without any incidents or accidents. Treatment timing based on larval and foliage development was excellent. Security for the project was also excellent.

No problems were encountered with the spray equipment, ground support equipment and/or personnel provided by the contractor, Summit Helicopters, Inc.

A trace amount of rain occurred during the second and third sorties. A light rain occurred in the project area approximately three hours after the project was complete. A total of .17 inches of rain occurred in the project area during the first four days after the treatment (.13 inches on May 1 and .04 inches on May 3). The intensity and amount of rainfall received in the project area should have minimal effects, if any, on the treatment's efficacy.

Figure 1. -- 2008 Andrews Air Force Base spray block map

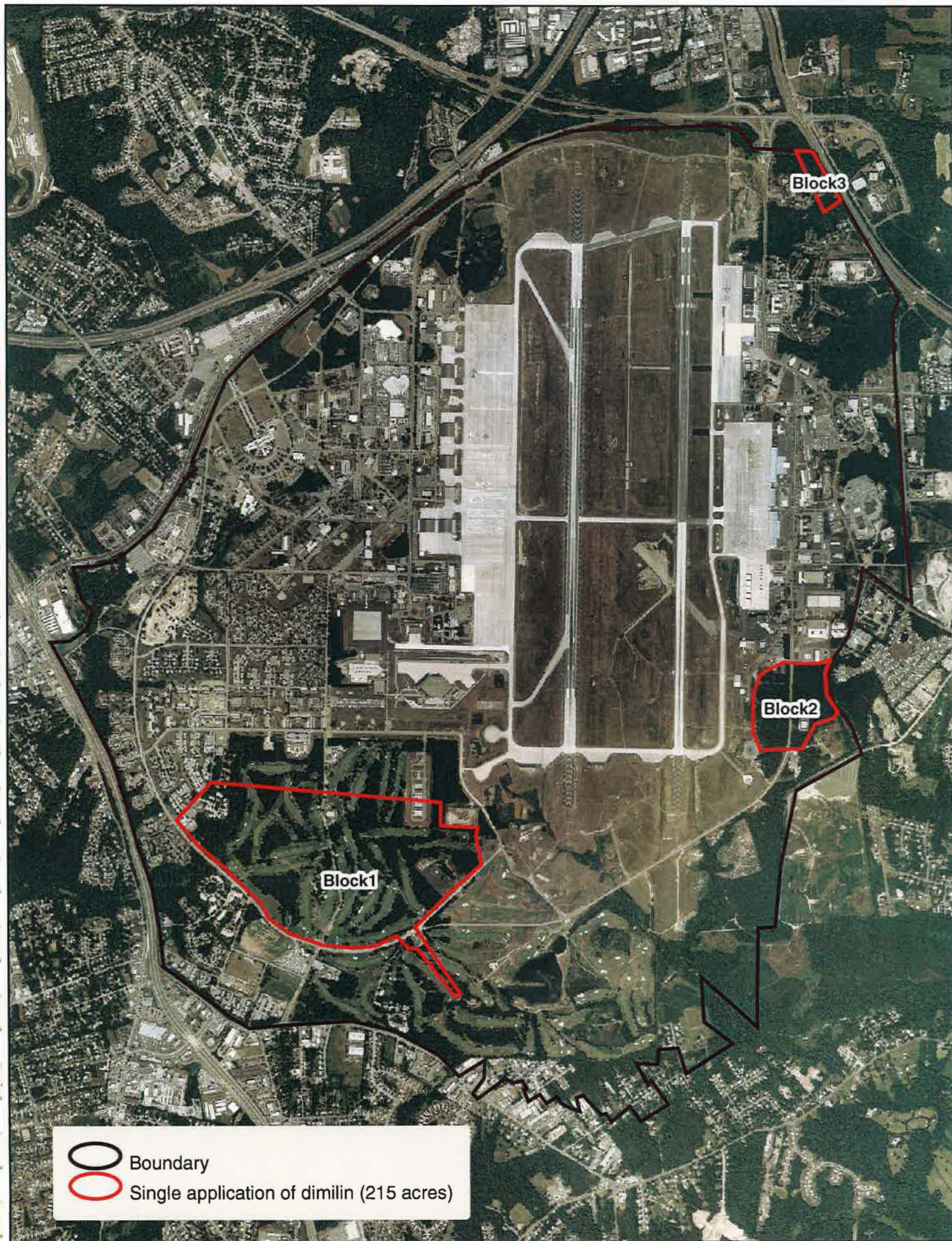


Figure 2. -- 2008 National Arboretum spray blocks.



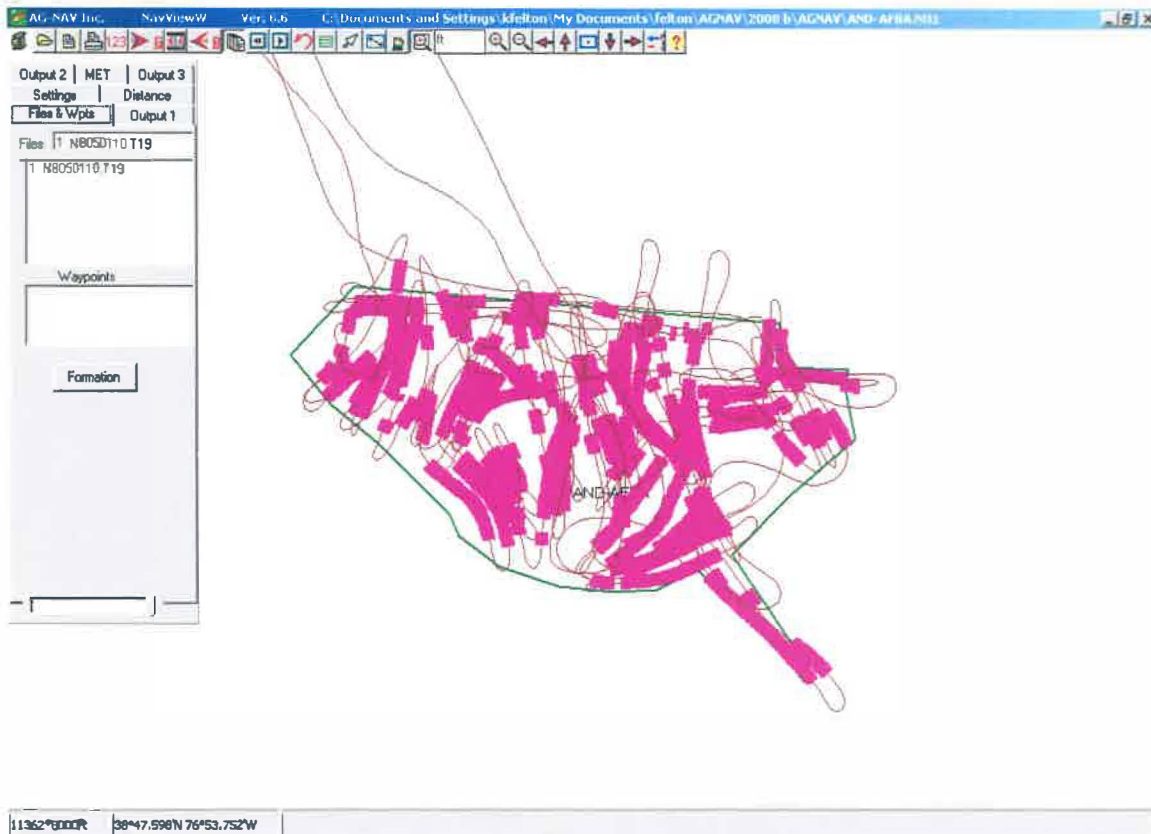
The only problem encountered during the project was the acquisition of the waiver to fly into the Flight Restricted Zone (FRZ) located around Washington, DC. The contractor applied for this waiver to the Transportation Security Administration (TSA) approximately 3 weeks before the project was to commence. The waiver was eventually obtained late on April 29, so it pushed back the treatment date from April 30 to May 1. I'm not sure if there was anything different the contractor or I could have done to speed up the process of obtaining the waiver.

If treatment is necessary at both Andrews Air Force Base and the National Arboretum in the same year, the projects should be combined under one contract similar to this year. That way the overall cost is less and the overall amount of work required by the Government is also less.

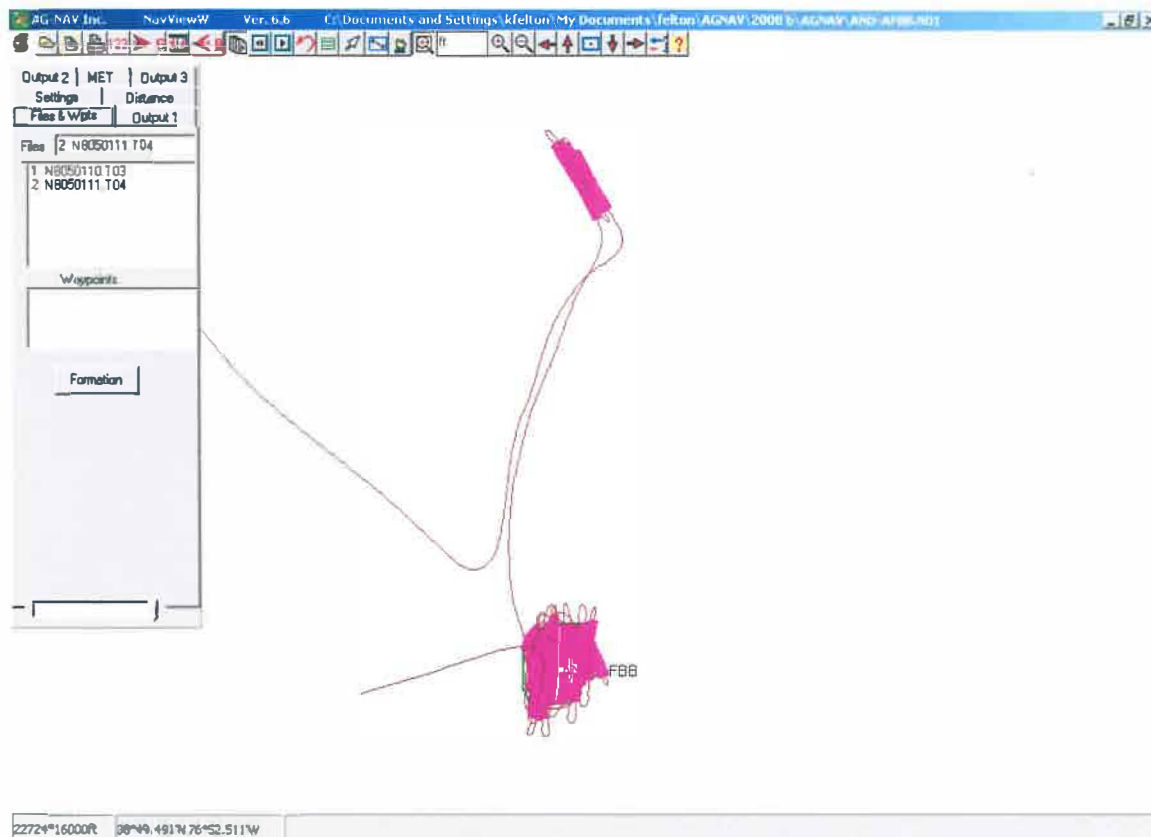
APPENDIX A

AG-NAV PRINTOUTS

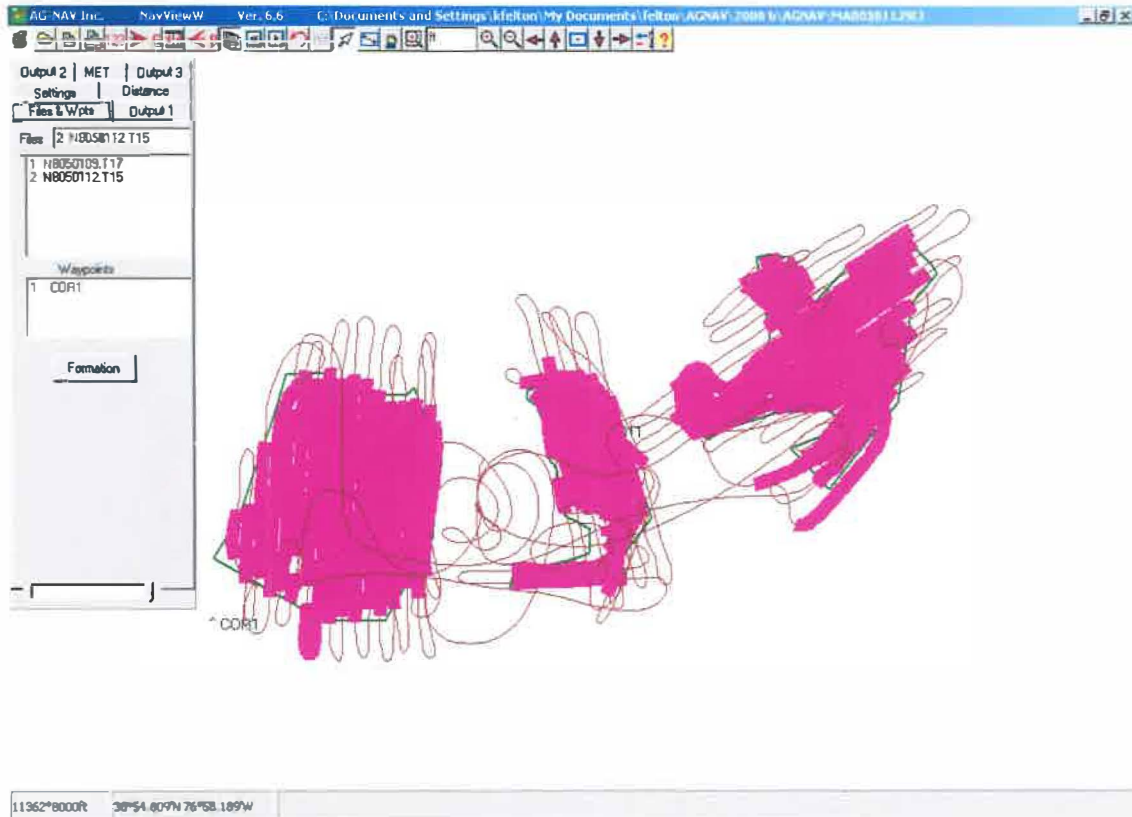
Andrews Air Force Base Gypsy Moth Suppression Project
Block 1- May 1, 2008.



Andrews Air Force Base Gypsy Moth Suppression Project
Blocks 2 and 3- May 1, 2008.



USDA National Arboretum Gypsy Moth Suppression Project
Blocks 1,2,3 – May 1, 2008.



APPENDIX B

DAILY SORTIE REPORT

DAILY SORTIE REPORT

Project coordinator: Rod Whiteman

Date: 2/1/08

Aircraft ID: 206BE

Location: National Arboretum

Pilot: Tim Carlton

[illegible]

COMMENTS (Cause of delays, accidents, reason for shut-downs etc.)

SIGNATURES

Project Coordinator:

Contractors Representative:



United States
Department of
Agriculture

Forest
Service

Northeastern Area
State & Private
Forestry

180 Canfield Street
Morgantown, WV 26505

File Code: 3400

Date: May 8, 2008

Mr. Kevin Porteck
3300 Sidney Brooks Building 532
Brooks City-Base, TX 78235-5112

Dear Mr. Porteck:

Enclosed is the report that documents the gypsy moth suppression project at Andrews Air Force Base and the USDA National Arboretum on May 1, 2008.

A total of 215 acres were treated at Andrews Air Force Base and 200 acres were treated at the Arboretum. The insect growth regulator Dimilin was used and was applied with a rotary-winged aircraft.

I would like to thank all involved with the project. A special thanks goes out to Anne Kaval from Andrews Air Force Base and Chris Carley from the National Arboretum.

Treatment efficacy will be evaluated through a defoliation survey conducted in June and an egg mass survey this fall.

If you have any questions concerning the suppression project or report, please call me at 304-285-1555.

Sincerely,

RODNEY L. WHITEMAN

Forester
Forest Health Protection

Enclosure

Cc: Anne Kaval, Andrews AFB
Patricia Gray, Andrews AFB
Chris Carley, National Arboretum
Robert Lueckel, MFO
Noel Schneeberger, AO

RLW/blm



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